

fronte super oculos bicorni; cornu anteriore distincto, recurvo; posteriore gibboso-cristiformi; filamento intermedio inconspicuo: brachiis pectoralibus ventralibusque exsertis.

D. 12; A. 7; P. 10; V. 5; C. $\frac{1+I}{1+I} + V$.

A single individual only has occurred of this pretty little species, which in the foregoing characters appears distinct enough from all enumerated by MM. Cuv. and Val.; approaching, perhaps, nearest to *Ch. furcipilis*, *pardalis*, or *coccineus*. It was only one and three-fourths of an inch long, and seven-eighths of an inch deep. The whole fish is strongly scabrous to the touch.

Fam. LABRIDÆ.

Crenilabrus caninus, nob. Synops. 186.

A most remarkable variety of this fish has the preopercle perfectly entire; invalidating thus completely the generic character. This state of the species appears permanent, and independent of age or size; whilst it is wholly unaccompanied by other marks of difference or indications of disease. It is rare comparatively with the normal form.

Crenilabrus luscus, nob. in Syn. Mad. Fish 187; nec Yarrellii nec Linnæi.

This also proves distinct from Mr. Couch's Scale-rayed Wrasse (*Acantholabrus Couchii*, Cuv. and Val. 13. 248), to which, as figured by Yarrell for the *Labrus luscus*, L. (a true *Labrus*, according to Valenciennes,) I had formerly referred it. A still nearer ally appears, however, to be *Acantholabrus Palloni*, Cuv. and Val. 13. 243 (*Crenilabrus exoletus*, Risso, haud *Labrus exoletus*, L.). From this it differs in the extension up between each of the spines of the dorsal and anal fins of generally four of the large scales into a curious distinct and moveable imbricated appendage; in the large dark spot or patch on the hinder end of the spiny portion of the dorsal fin; in having two dark spots on each side at the base of the caudal fin, one on the dorsal, and another fainter on the ventral line; and lastly in the general colour. In the first and last of these four points, it agrees better with *Acantholabrus Couchii*, Val. (*Crenilabrus luscus*, Yarr., Brit. Fish. 1. 300); but it differs in the other two, is only half the size, and whilst the dorsal and the anal fins have severally one spine less, the dorsal has one soft ray more.

LABRUS RETICULATUS.

This fish cannot be at present safely referred to the Ballan Wrasse of British Authors (*Labrus maculatus*, Bl.), Yarr. 1. 275; although

in size and form of body, no less than in the peculiar lowness of the spiny portion of the dorsal fin, and abrupt production of the soft part of the same, and of the anal fin, as well as in the number of the rays of all the fins, there is a strong agreement. It will, I think, however, ultimately prove merely a dark variety of that species. The colour is peculiarly sombre; being a dark brown, approaching on the back almost to black; the whole beautifully reticulated with dark chesnut-brown lines, forming a border to each scale, and leaving the centre pale. The preoperculum was scaly. A single individual occurred in March 1838, and measured sixteen inches in length. Its fin-formula was,

$$D. 19 + 11; A. 3 + 9; P. 14; V. 1 + 5; C. \frac{4 + \overline{I + VI}}{3 + \overline{I + V}}; B. M. 5.$$

This individual has been deposited in the Society's collection.

JULIS MELANURA. *J. oblongus, postice nigrescens: capite superne dorsoque olivaceo-fuscis: lateribus perpendiculate strigatis; strigis posterioribus nigricantibus: pinnae dorsalis antice altiores rudiis tribus primordialibus longioribus, operculique angulo lato truncato, basique primarum pectoralium caeruleo-nigrescente notatis: pinna dorsali analique fasciatis, basi nudis; caudali rotundato nigricante: squamis parvis: dente solitario majore ad canthum oris utrinque, antrorsum porrecto.*

$$D. 9 + 12; A. 3 + 12; P. 14 \text{ v. } 15; V. 1 + 5; C. \frac{4 + VI}{4 + VI}; M. B. 6; \text{Vert}^{\text{e}}. 25.$$

Julis speciosa, nob. in Syn. Mad. Fish 186; haud Rissoi.

———, Cuv. and Val., Hist. 13. 375; quoad tantum exempla *Canariensia*, et forsan quidem *Maderensia*.

On re-examination and a close comparison of this fish with MM. Cuvier and Valenciennes' description of the true Mediterranean *J. speciosa*, of Risso, I find that it is properly distinct; although a Canarian individual at least of it has been referred by Valenciennes, as the Maderan fish was formerly by me, to Risso's species. It differs chiefly in the elevation of the three first rays of the dorsal fin, the spot on which is small, not large; in the deep blackness of the caudal fin and hinder part of the tail or body; and, lastly, in being of considerably larger size (8–10 inches in length) than the true Mediterranean *J. speciosa*, Riss. Not having met at present with any other fishes in Madeira which agree so nearly as *J. melanura* with that species, I cannot help suspecting that in M. Valenciennes' Maderan specimens of his *J. speciosa* may exist the principal peculiarities which he has expressly noted in Mr. Webb's Canarian example, and which are precisely those of *Julis melanura*.

ACANTHOLABRUS IMBRICATUS. *A. pinna dorsali analique basi squamosis; squamis subquaternis, bractearum modo imbricatis, inter spinas assurgentibus: dorsalis parte spinosa postice unimaculato: cauda utrinque bimaculata: squamis magnis.*

D. 20 + 9; A. 5 + 8; P. 15; V. 1 + 5; C. $\frac{3 \text{ v. } 4}{3 \text{ v. } 4}$ + III; M. B. 5.

Fam. FISTULARIDÆ.

CENTRISCUS GRACILIS. *C. corpore gracili, angusto, elliptico-oblongo, supra fusco, lateribus argenteis: rostro producto, elongato: pinna primæ dorsalis, inter oculos pinnamque caudalem mediæ, spina secunda mediocri, brevior, pinnam caudalem nequaquam attingente.*

1^{ma} D. 4 v. 5; 2^{da} D. 11; A. 17; V. 1 + 4; P. 15; C. $\frac{7 + \text{IV}}{7 + \text{V}}$.

Rarior.

In its shape and colour this is very obviously different from the common red Snipefish (*C. Scolopax*, L.). But I have not been able to assure myself that the above differences are not sexual. They are not certainly dependent upon size. The depth averages from one-fifth to one-sixth and a half of the whole length, instead of one-fourth of the same. In two individuals of the same length within one quarter of an inch, the depth of the larger (*C. Scolopax*, L.) was very nearly double that of the smaller (*C. gracilis*, nob.) and the 2nd spine of the 1st dorsal fin was respectively in each one-fourth and one-seventh of the whole length of the fish.

Fam. ESOCIDÆ.

BELONE GRACILIS, nob.—“*Catuta*.”

Early in March last year (1838) a fisherman brought alive in seawater two fishes, which, in their slenderness, and the upper jaw being only half the length of the lower, differed obviously from the common *B. vulgaris*. Measuring, however, seven or eight inches only in length, it seemed questionable, in the absence of equal-sized individuals of *B. vulgaris* for comparison, whether they might not be the young of that species. My friends, however, the Rev. L. Jenyns and Mr. Yarrell, have examined these two individuals, and the latter warrants me in stating, on their joint authority, that these two fishes are “not, in their opinion, *B. vulgaris*,” being “much more slender for the same or equal length.”

Scomberesox Saurus, Cuv.

The Portuguese name “*Delphine*” (rectius “*Delfim*”), is erroneously appended to this fish. Another individual has been lately brought to me with the name of “*Almeirão*,” but the species is far

too rare to have obtained any permanent and genuine appellation in Madeira.

Fam. SALMONIDÆ.

SCOPELUS MADERENSIS.

A small dark mulberry-coloured fish, which might easily be taken for the fry or young of *Pomatomus telescopus*, Risso. The dark vinous-coloured ground is concealed by very large deciduous platina-like scales. The only individual which has yet occurred was three inches long. It approaches very near to *Sc. Humboldti*, Risso, Hist. iii. 467. (supposed to be identical with Pennant's *Argentine*, Yar. 11. 94.), and has the row of longer silver dots, or pits, extending forwards from the root of the caudal fin along the ventral line: but it disagrees remarkably with the generic characters assigned to *Scopelus* by Cuvier, R. An. 2nd Ed. ii. 314, in having both the palatines and tongue aculeate with teeth.

The fin-formula in the Madeiran fish was

1st, D. 3 + 10; 2nd, D. 1 club- or feather-shaped;

A. 2 + 12; P. 13; V. 1 + 7; C. $\frac{7 + \overline{I + IX}}{6 + \overline{I + VIII}}$.

Gen. ALYSIA.

Corpus subelongatum, compressum; dorso postice ventreque spinoso-serratis. *Rostrum* brevissimum, ore rictuque magnis, hoc pone oculos diducto. *Dentes* minuti, tenues; in maxilla inferiore, Vomerem, et Palatinis scobinati. *Lingua* postice lateribus subaculeolata.

Squamæ magnæ, haud deciduæ, scabræ; squamis lineæ lateralis latissimis, maximis, scutellatis, s. per totam longitudinem loricato-imbricatis.

Pinnae ventrales sub apice pinnarum pectoralium sitæ. *Dorsales* duæ; prima inter Ventrates et Analem posita; 2^{da} ad finem analis, rudimentali. *Pinna caudalis* minima, furcata.

ALYSIA LORICATA.

The spinoso-serrate ventral and hinder part of the dorsal lines, together with the peculiar scales of the lateral line, appear to forbid the blending of this interesting little fish with the Cuvierian genus *Aulopus*, as defined in the R. Anim., Ed. 2. ii. 315, though they have many characters in common. The Maderan fish is no less rare than elegant. It scarcely exceeds two inches in length. The back is a deep blue; the sides bright silvery or platina; and a row of dead-silver dots or pits extends along the ventral line, as in the *Scopelus* above described. The fin-formula is

1st, D. 2 + 10; 2nd, D. rudimentary; A. 2 + 21 (+ 8 detached depressed points or spines); P. 15 or 16; V. 1 + 5;

$$C. \frac{4 + \overline{I + IX}}{3 + \overline{I + VIII}}.$$

Fam. GADIDÆ.

MACROURUS ATLANTICUS.—“*Praga*” or “*Lagartixa do mar*.”—*M. fusco-cinereus*, dorso vinoso, gutturis umbilico pinnisque ventralibus atris : squamis areolato-scaberrimis, echinalatis, ecarinatis, inermibus : oculis maximis.

M. rupestris, nob. in Synops. Mad. Fish, p. 190, nec Bl. nec Cuv. et omiss. syn. *Lepidoleprus calorhynchus*, Risso.

On further examination, this most singular fish appears to be quite distinct from *M. rupestris*, Bl. t. 177; and therefore, according to Cuvier (R. Anim. 2nd Ed. ii. 337, note,) from *Lepidoleprus calorhynchus*, Risso, through which indeed alone I had referred it to the northern fish described by Bloch. But besides the points included in the specific character, the first ray of the first dorsal fin is neither serrate nor stronger than the rest. The diameter of the eye is one twelfth or one thirteenth part of the whole length, which scarcely exceeds one foot.

Fam. PLEURONECTIDÆ.

RHOMBUS CRISTATUS. *R. corpore oblongo-elliptico : oculis approximatiss : dentibus tenuibus pectinatis ; in maxilla superiore uniseriatis ; in inferiore anguste scobinatis : pinna dorsalis dimidii anterioris radiis apice liberis ; primordialibus (2^{do} 6^m.) productis, elongatis : latere (sinistro) fusco, immaculato : squamis (haud deciduis) magnis, margine scabris.*

D. 92; A. 75; V. 6; P. 1 + 9; C. $\frac{3 + VI}{3 + V}$. Rariss.

The Whiff of British authors (*R. megastoma*, Yarr. 2. 251) appears the nearest ally of this apparently new species. Indeed, except for Mr. Yarrell's more detailed account, I should have scarcely perhaps scrupled referring it to “*La Cardine ou Calimande*” of Cuvier's R. Anim. 2. 341, of which he says, “*ses premiers rayons sont libres*”; of course meaning of the dorsal fin. Nothing is, however, discernible of this in either Mr. Yarrell's figure or description of “*The Whiff*”; nor even, if correct, does it express sufficiently the peculiarity of this part in the Maderan fish. The only individual which has yet occurred was five and a quarter inches long.

Fam. CYCLOPTERIDÆ.

43. LEPADOGASTER ZEBRINUS.—“*Chupa sangue*.” *L. fusco-nigrescens, lateribus postice strigis obliquis, nuchaque fasciis diver-*

gentibus saturatoribus maculisque binis cæruleis pyriformibus pictis: naribus biciliatis: pinnis dorsalibus analibusque caudali adnatis.

D. 17 v. 16; A. 10 v. 9; P. 15 v. 16; V^s. 4; C $\frac{7}{4}$ + X. Haud rara.

In the double nasal cilia, and connexion of the caudal with the dorsal and anal fins, this little fish agrees with *L. cornubicus* (Flem.), Yarr. 2. 264. The structure of the sucking disk is also similar to the representation of the same part in that species, and not to that of the "*bimaculated Sucker*," at p. 268. In this particular it perfectly agrees also with the former species indicated in my Synopsis, p. 190; which is, however, perfectly distinct specifically, having neither a nasal cilium nor the caudal fin united with the dorsal and anal fins. Of this last-mentioned species no second example has yet occurred. The present (*L. zebrinus*) is not by any means uncommon. It varies considerably in intensity of colour, and in the distinctness of the darker stripes upon the nape and flanks. The nasal cilia are of the general dark brown or blackish tint.

Fam. ECHENEIDÆ.

SS. Cauda lunata.

Echeneis Remora, L. Syst. Ed. 12.—"*Pegador*." *E. tota cinereo-fuliginosa, nigrescens: laminis disci xvii. v. xviii.; pinnis pectoralibus brevibus, ovatis, integris, apice rotundatis: lingua lævi.*

D. 23; A. 23; P. 26; V. 1 + 5; C. $\frac{3 \text{ v. } 4 + \text{VIII}}{3 \text{ v. } 4 + \text{VII}}$; M. B. 9. Rarior.

ECHENEIS PALLIDA. *E. tota pallide cinerea, fuligineo hinc et hinc subnebulata: laminis xix.; pinnis pectoralibus brevibus, latis, apice rotundatis, subtruncatis, tenuiter crenulatis: lingua medio scobinata.*

D. 24; A. 22; P. 27; V. 1 + 5; C. $\frac{3 \text{ v. } 4 + \text{VIII}}{3 \text{ v. } 4 + \text{VII}}$; M. B. 9. Rariss.

SS. Cauda integra, S. truncata.

ECHENEIS JACOBÆA.—*E. tota cinereo-fuliginosa, nigrescens: laminis xix.: pinnis pectoralibus brevibus, latis, pectinato-rotundatis crenatis: ventre sulcato: lingua scabra.*

D. 24; A. 24; P. 21; V. 1 + 5; C. $\frac{3 + \text{VII}}{3 + \text{VIII}}$; M. B. 8. Rariss.

ECHENEIS VITTATA.—*E. purpureo-nigrescens, pallido variegata, fasciæque nigra longitudinali laterali, antice utrinque albo marginata: pinnis pectoralibus ovatis, acutiusculis, integris; pinnae dorsalis analisque antice caudalisque marginibus albis: laminis xxiv.: lingua scabra: oculis magnis: corpore elongato, postice valde attenuato, gracili.*